

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. 6-95-104
WDID NO. 6B360304013

LENWOOD/HINKLEY

36-AA-0061

REVISED WASTE DISCHARGE REQUIREMENTS

FOR

LENWOOD-HINKLEY CLASS III LANDFILL

San Bernardino County

The California Regional Water Quality Control Board, Lahontan Region (Regional Board) finds:

1. Discharger

On January 13, 1995 the County of San Bernardino submitted a complete revised Report of Waste Discharge for the Lenwood-Hinkley Class III Landfill. For the purpose of this Regional Board Order (Order), the County of San Bernardino is referred to as the "Discharger."

2. Landfill

The Lenwood-Hinkley Class III Landfill is the facility that receives and stores waste. For the purposes of this Order, the Lenwood-Hinkley Class III Landfill is referred to as the "Landfill."

3. Order History

The Regional Board previously adopted Waste Discharge Requirements (WDRs) for the Landfill under Board Order No. 6-85-134, which was adopted on November 14, 1985. Board Order No. 6-93-10042 was adopted on September 9, 1993, and amended the WDRs for the Landfill to incorporate the requirements of Title 40, Code of Federal Regulations, Parts 257 and 258 (Subtitle D) as implemented in the State of California under State Water Resources Control Board (SWRCB) Resolution No. 93-62.

4. Enforcement History

The Regional Board Executive Officer issued Cleanup and Abatement Order (CAO) No. 6-94-1 to the Discharger on February 2, 1994 to require the cleanup and abatement of a condition of ground water pollution beneath the Landfill. The Discharger is currently investigating the condition of pollution, and has made a reasonable attempt to comply with the CAO in a manner which is within financial and physical constraints. The Discharger is not in compliance with the CAO which requires cleanup operations to be initiated no later than May 1, 1995.

On January 1, 1992 revised regulations pursuant to Article 5, Chapter 15, Title 23, California Code of Regulations (Chapter 15) became effective. These regulations include requirements for ground water monitoring, and describe a process for the investigation and cleanup and abatement of ground water pollution. This Order rescinds CAO No. 6-94-1 and implements the revised Chapter 15 regulations. Monitoring and Reporting Program No. 95-104 includes a time schedule which requires the Discharger to continue an Evaluation Monitoring Program (EMP) and develop a final Corrective Action Program (CAP) as required by Chapter 15. The Chapter 15 requirements contained in the Monitoring and Reporting Program are being required pursuant to Section 13267 of the California Water Code (CWC).

5. Reason for Action

The Regional Board is revising these WDRs to require the Discharger to achieve compliance with the revised requirements of Chapter 15 and to incorporate requirements of the previously adopted Board Order amendment No. 6-93-10042. The amendment was adopted to implement the Subtitle D regulations in accordance with SWRCB Resolution No. 93-62.

6. Landfill Location

The Landfill is located approximately five miles west of the Community of Hinkley, San Bernardino County, within Section 20, T10N, R2W, SBM, as shown on Attachment "A," which is made part of this Order.

7. Description of Landfill

The Landfill is an unlined landfill which receives greater than 100 tons of waste per day. The Landfill is permitted by the California Integrated Waste Management Board to receive 110 tons per day. Based on the quantity of waste received per day, the Landfill is a Large landfill as defined in Subtitle D. As such, Subtitle D requirements became effective for this Landfill on October 9, 1993. Regional Board staff have reviewed information submitted by the Discharger which illustrates the footprint of waste discharged as of October 9, 1993. The footprint documents the limits of waste which are exempt from Subtitle D requirements for composite liners, and is shown as Attachment "B", which is made a part of this Order.

8. Authorized Disposal Sites

The footprint of waste shown in Attachment "B" is the only authorized Landfill disposal site. A revised Report of Waste Discharge is required if the Discharger proposes to discharge waste outside the footprint area.

9. Waste Classification

The Landfill receives waste derived from the Communities of Lenwood, Hinkley, and the surrounding desert communities. The waste received at the Landfill is defined in Sections 2523 and 2524 of Chapter 15 as inert and non-hazardous solid waste, respectively, and is defined as municipal solid waste in Subtitle D.

10. Waste Management Unit Classification

Pursuant to Section 2533, Chapter 15, Title 23, California Code of Regulations, the Landfill is classified as a Class III Waste Management Unit. The Landfill is classified as Large Landfill in Subtitle D.

11. Subtitle D Compliance Status

Board Order amendment No. 6-93-10042 required the submittal of several items in order to comply with Subtitle D for the Landfill. The Discharger has submitted complete information regarding the acceptance of liquids, the existing waste footprint, the distance from the Landfill to the nearest drinking water source, the Water Quality Protection Standard (WQPS), and whether the Landfill is located in a 100 year floodplain or a wetlands. The above listed items which have already been submitted fulfill the submittal requirements of Subtitle D as implemented by SWRCB Resolution No. 93-62.

12. Water Quality Protection Standard

The WQPS consists of constituents of concern (including monitoring parameters), concentration limits, monitoring points, and the point of compliance. The standard applies over the active life of the Landfill, closure and post-closure maintenance period, and the compliance period. The WQPS is documented in Monitoring and Reporting Program No. 95-104.

The ground water at the point of compliance has been polluted by releases from the Landfill and/or formerly operated unlined septage ponds. The constituents of concern and monitoring points are described in Monitoring and Reporting Program 95-104, which is attached to and made part of this Order. The monitoring points have been established to evaluate the condition of ground water pollution during the EMP, and includes wells at the point of compliance.

13. Statistical Methods

Statistical analysis of monitoring data is not necessary for this Landfill because the ground water has already been polluted, and the Discharger is conducting an EMP. The Discharger will conduct non-statistical analysis of data to determine if any new releases occur during the EMP and/or CAP. Non-statistical methods for data analysis are described in Monitoring and Reporting Program No. 95-104.

14. Detection Monitoring

The Discharger is currently conducting an EMP to evaluate the extent of the impacts to water quality and to design a CAP. A Detection Monitoring Program is not required during the EMP or the CAP. A Detection Monitoring Program will be established once the condition of ground water pollution is abated.

15. Evaluation Monitoring

An EMP is required, pursuant to Section 2550.9 of Chapter 15, Title 23, California Code of Regulations, to evaluate evidence of a release which has been verified at the Facility. Monitoring and Reporting Program 95-104 establishes and describes the EMP, and includes a time schedule for the Discharger to complete the EMP and propose a CAP.

16. Corrective Action

A CAP to remediate released wastes from the Facility may be required pursuant to Section 2550.10 should results of the EMP warrant a CAP.

17. Discharge of Monitoring Well Purge Water

As part of regularly scheduled ground water sampling events, ground water monitoring wells are purged of several volumes of water to assure collection of a representative sample. The Discharger has proposed to use purge water for dust control at the Landfill. Because the aquifer beneath the site is polluted by Volatile Organic Chemicals (VOCs), the purge water also contains these constituents at concentrations greater than background ground water quality. The Discharger has proposed to place all purge water in a holding tank at the Landfill, and then sample the water to determine the concentration of contaminants. The best practicable treatment technology can reasonably remove VOCs from water to non-detectable concentrations. ~~This Order prohibits the use of water containing detectable concentrations of VOCs for dust control.~~

18. Site Geology

The Landfill is located on unconsolidated coarse grained alluvium which is underlain by consolidated and fractured quartz diorite and marble. The thickness of alluvium ranges from zero to approximately 30 feet below ground surface.

19. Site Hydrogeology

Ground water exists in the fractured bedrock beneath the Landfill at depths of approximately 70 feet below ground surface. Ground water flows toward the north-northwest.

20. Site Surface Hydrology and Storm Water Runoff

There is no perennial surface water flow at the site. All storm water from the Landfill is regulated under the state Amended General Industrial Activities Storm Water Permit.

21. Site Topography

Site topography is shown on Attachment "A", which is made a part of this Order.

22. Climatology

The precipitation in the area of the Landfill is approximately 3.4 inches annually. The evaporation rate is approximately 110 inches annually.

23. Land Uses

The land uses at and surrounding the Landfill consists of the following:

- a. rural residential, and
- b. open desert land.

24. Closure and Post-Closure Maintenance

The Discharger has submitted a Preliminary Closure and Post-Closure Monitoring Plan (CPCMP). The plan generally proposes in place closure of the waste and an extended period of site monitoring. The monitoring media include the unsaturated zone, ground water, and final cover materials. On July 18, 1995 Regional Board staff deemed the plan complete and technically adequate. This Order requires that the Discharger review the plan annually to determine if significant changes in the operation of the Landfill warrant an update of the plan.

25. Financial Assurance

The Discharger has provided documentation that a financial assurance fund has been developed for closure, post-closure maintenance, and potential corrective action requirements. The fund has been developed as a single entity for all landfills owned and/or operated by the County of San Bernardino. The fund meets the requirements of Chapter 15 and Subtitle D for financial assurance. This Order requires the Discharger to report the amount of money available in the fund as part of the annual report. This Order also requires that the Discharger demonstrate in an annual report that the amount of financial assurance is adequate, or increase the amount of financial assurance.

26. Receiving Waters

The receiving waters are the ground waters of the Middle Mojave River Ground Water Basin (Department of Water Resources Hydrologic Unit No. 6-42).

27. Lahontan Basin Plan

The Regional Board adopted a Water Quality Control Plan for the Lahontan Region (Basin Plan) which became effective on March 31, 1995. This Order implements the Basin Plan.

28. Beneficial Ground Water Uses

The present and probable beneficial uses of the ground waters of the Middle Mojave River Valley Ground Water Basin as set forth and defined in the Basin Plan are:

- a. municipal and domestic supply;
- b. agricultural supply;
- c. industrial service supply;
- d. freshwater replenishment; and
- e. aquaculture.

29. California Environmental Quality Act

These WDRs govern an existing facility that the Discharger is currently operating. The project consists only of the continued operation of the Landfill and is therefore exempt from the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) in accordance with Section 15301 of the CEQA Guidelines.

30. Notification of Interested Parties

The Regional Board has notified the Discharger and all known interested agencies and persons of its intent to adopt revised WDRs for the project.

31. Consideration of Interested Parties

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Discharger shall comply with the following:

I. DISCHARGE SPECIFICATIONS

A. Receiving Water Limitations

The discharge of waste shall not cause the presence of the following substances or conditions in ground waters of the Middle Mojave River Valley Ground Water Basin:

1. any perceptible color, odor, taste, or foaming;
2. any presence of toxic substances in concentrations that individually, collectively, or cumulatively cause detrimental physiological response in humans, plants, animals, or aquatic life; and
3. the presence of constituents of concern in concentrations that exceed background levels.

II. REQUIREMENTS AND PROHIBITIONS

A. General

1. The discharge shall not cause a pollution as defined in Section 13050 of the CWC, or a threatened pollution.
2. The discharge shall not cause a nuisance as defined in Section 13050 of the CWC.
3. The discharge of solid wastes, leachate, or any other deleterious material to the ground waters of the Middle Mojave River Valley Ground Water Basin is prohibited.
4. The discharge of waste except to the authorized disposal site is prohibited.
5. The disposal sites shall be protected from inundation, washout, or erosion of wastes and erosion of covering materials resulting from a storm or a flood having recurrence interval of once in 100 years.
6. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources shall not contact or percolate through solid wastes discharged at the site.
7. The exterior surfaces of the disposal sites shall be graded to promote lateral runoff of precipitation and to prevent ponding.
8. Water used for dust control during disposal site operations shall be limited to amounts which will not result in runoff.
9. Wastes other than inert wastes shall not be placed in ponded water from any source whatsoever.
10. No hazardous or designated wastes shall be discharged to the Landfill.

11. The discharge of wastes in a manner that does not maintain a five foot soil separation between the wastes and the seasonal high ground water elevation is prohibited.
12. Waste discharged to the Landfill shall have a moisture content of 50 percent or less.
13. The Discharger shall remove and relocate any waste which is or has been discharged at the disposal sites in violation of these requirements. The waste shall be relocated to a site which is permitted to receive such wastes. All removal and relocation projects shall be coordinated with regulatory agencies, including the County of San Bernardino.
14. During periods of precipitation, the disposal activity shall be confined to the smallest area possible based on the anticipated quantity of wastes and operation procedures.
15. At closure, all facilities must be closed in accordance with a final CPCMP approved by the Regional Board.
16. At any given time, the concentration limit for each constituent of concern shall be equal to the background value of that constituent.
17. The concentration limits for each constituent of concern shall not be exceeded.
18. All water used for dust control shall not contain detectable concentrations of VOCs.

B. Detection Monitoring Program

The Discharger shall establish a detection monitoring program as required in Section 2550.1(a)(1) of Chapter 15 if required by the Regional Board.

C. Evaluation Monitoring Program

The Discharger shall establish a revised evaluation monitoring program whenever there is significant evidence of a new release from the Landfill as required in Section 2550.1(a)(2) or (3) of Chapter 15.

D. Corrective Action Program

The Discharger shall institute a corrective action program when required pursuant to Section 2550.1(a)(4) of Chapter 15.

III. DATA ANALYSIS

A. Nonstatistical Analysis

The Discharger shall determine whether there is significant non-statistical evidence of a new release from the Landfill. Non-statistical evidence may include time series plots, unexplained volumetric changes in the Landfill, unexplained stress in biological communities, unexplained changes in soil characteristics, visible signs of leachate migration, and unexplained water table mounding beneath or adjacent to the Landfill, or any other change in the environment that could be reasonably be expected to be the result of a new release from the Landfill.

B. Verification Procedures

1. The Discharger shall immediately initiate verification procedures as specified below whenever there is a determination by the Discharger or Executive Officer that there is evidence of a new release. If the Discharger declines the opportunity to conduct verification procedures, the Discharger shall submit a technical report as described below under the heading Technical Report Without Verification Procedures.
2. The verification procedure shall only be performed for the constituent(s) that has shown evidence of a new release, and shall be performed for those monitoring points at which a new release is indicated.
3. The Discharger shall either conduct a composite retest using data from the initial sampling event with all data obtained from the resampling event or shall conduct a discrete retest in which only data obtained from the resampling event shall be analyzed in order to verify evidence of a new release.
4. The Discharger shall report to the Regional Board by certified mail the results of the verification procedure, as well as all concentration data collected for use in the retest within seven days of the last laboratory analysis.
5. The Discharger shall determine, within 45 days after completion of sampling, whether there is evidence of a new release from the Landfill at each monitoring point. If there is evidence of a new release, the Discharger shall immediately notify the Regional Board by certified mail. The Executive Officer may make an independent finding that there is evidence of a new release.

6. If the Discharger or Executive Officer verifies evidence of a new release, the Discharger is required to submit, within 90 days of a determination that there is or was a new release, a technical report pursuant to Section 13267(b) of the CWC. The report shall propose a revised EMP OR make a demonstration to the Regional Board that there is a source other than the Landfill that caused evidence of a new release.

C. Technical Report Without Verification Procedures

If the Discharger chooses not to initiate verification procedures, a technical report shall be submitted pursuant to Section 13267(b) of the CWC. The report shall propose a revised EMP, OR, attempt to demonstrate that the new release did not originate from the Landfill.

IV. PROVISIONS

A. Rescission of Waste Discharge Requirements

Board Order No.'s 6-85-134 and 6-93-10042 are hereby rescinded.

B. Rescission of Cleanup and Abatement Order

CAO No. 6-94-1 is hereby rescinded.

C. Standard Provisions

The Discharger shall comply with the "Standard Provisions for Waste Discharge Requirements," dated September 1, 1994, in Attachment "C", which is made part of this Order.

D. Monitoring and Reporting

1. Pursuant to the CWC Section 13267(b), the Discharger shall comply with the Monitoring and Reporting Program No. 95-104 as specified by the Executive Officer.
2. The Discharger shall comply with the "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made part of the Monitoring and Reporting Program.

E. Closure and Post-Closure

The preliminary CPCMP shall be updated if there is a substantial change in operations. A report shall be submitted annually indicating conformance with existing operations. To comply with Chapter 15, a final CPCMP shall be submitted at least 180 days prior to beginning any partial or final closure activities or at least 120 days prior to discontinuing the use of the site for waste treatment, storage or disposal, whichever is greater. The California Integrated Waste Management Board, pursuant to Title 14, California Code of Regulations, requires the submittal of a final closure plan a minimum of two years prior to closure.


F. Financial Assurance

The Discharger shall submit a report annually providing evidence that adequate financial assurance pursuant to the requirements of the WDRs has been provided for closure and for potential releases. Evidence shall include the total amount of money available in the fund developed by the Discharger. In addition, the Discharger shall either provide evidence that the amount of financial assurance is still adequate or increase the amount of financial assurance by the appropriate amount. An increase may be necessary due to inflation, a change in regulatory requirements, a change in the approved closure plan, or other unforeseen events.

G. Modifications to the Landfill

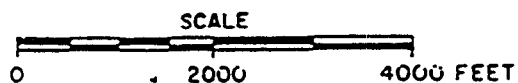
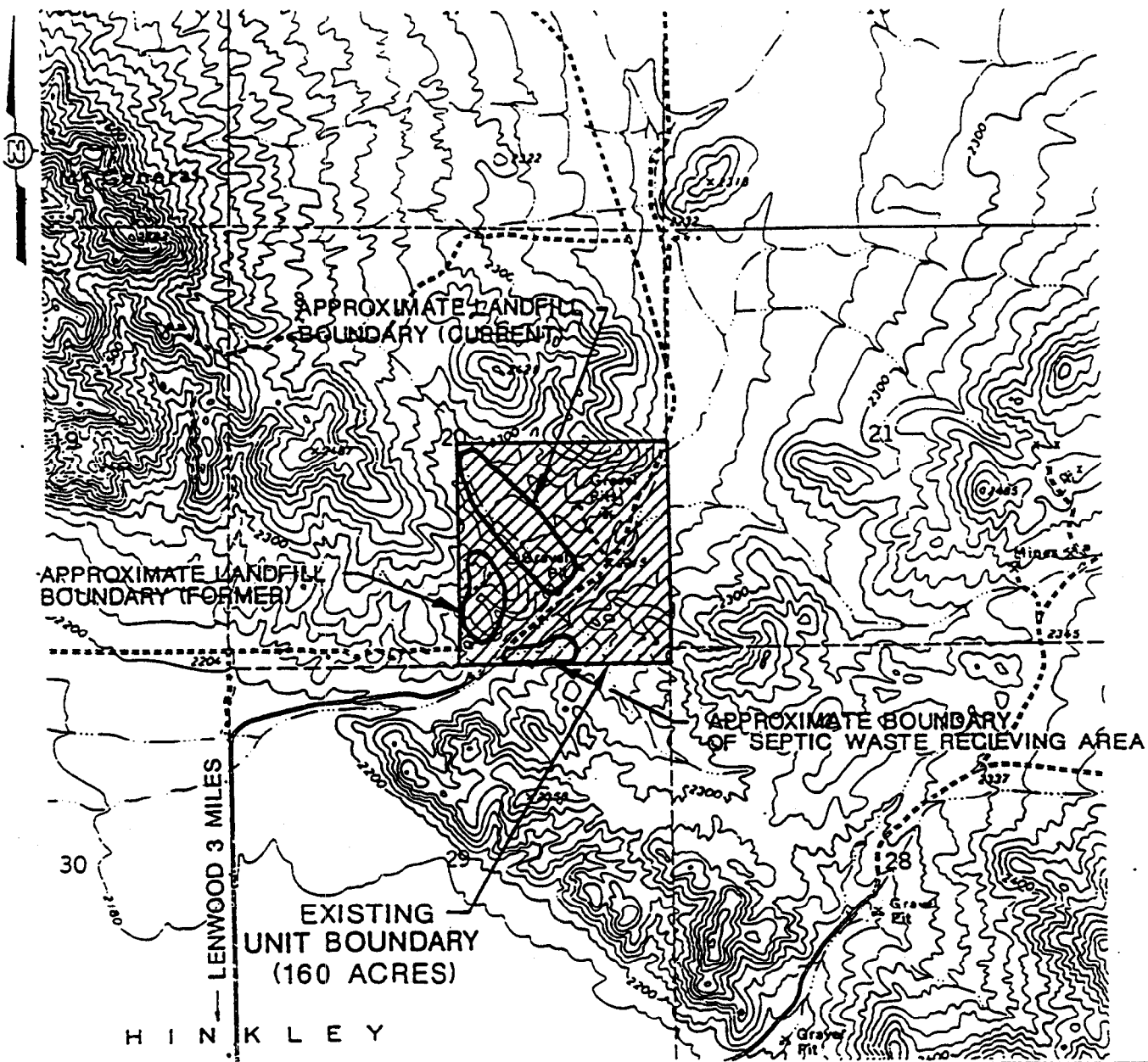
If the Discharger intends to expand the capacity of the Landfill, a report shall be filed no later than 90 days after the total quantity of waste discharged at this site equals 75 percent of the reported capacity of the site. The report shall contain a detailed plan for site expansion. This plan shall include, but is not limited to a time schedule for studies design, and other steps needed to provide additional capacity. If site expansion is not undertaken prior to the site reaching the reported capacity, the total quantity discharged shall be limited to the reported capacity.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by California Regional Water Quality Control Board, Lahontan Region, on September 14, 1995.


HAROLD J. SINGER
EXECUTIVE OFFICER

Attachments:

- A. Location Map and Topography
- B. Landfill Footprint of Waste
- C. Standard Provisions for Waste Discharge Requirements



ATTACHMENT "A" LOCATION MAP AND TOPOGRAPHY

REFERENCE:

7.5 MIN. USGS TOPOGRAPHIC MAP OF
BARSTOW, CALIFORNIA QUADRANGLE
DATED: 1971
SCALE: 1:24000